

### REMARKS

Claims 55-89 were pending in the present application. Claims 55-89 stand rejected solely under 35 U.S.C. § 112, second paragraph as discussed below. By virtue of this response, no claims have been cancelled, amended, or added. Accordingly, claims 55-89 are currently under consideration.

#### **Rejection under 35 U.S.C. § 112, second paragraph**

Claims 55-89 stand rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In particular, the Examiner states:

Re claims 55, 70, 74 & 83, the phrase “a single crystal silicon structure formed **in said recessed region** of the first layer” is unclear as where the single crystal structure is positioned in the device. Fig.9 shows recess 204 & 206, which does not have any structure. (Emphasis in original)

Applicants respectively traverse the rejection and submit that claims 55, 70, 74, and 83 are definite and particularly point out and distinctly claim the subject matter regarded as the invention under 35 U.S.C §112, second paragraph.

Initially, Applicants note that only claims 55 and 83 included the alleged indefinite claim language. Claims 70 and 74 are method claims and do not include the recitation of “a single crystal silicon structure formed in said recessed region of the first layer.” Accordingly, Applicants submit that the rejection to claims 70-77 should be withdrawn.

In regard to claims 55 and 83, Applicants submit the claim language is clear and definite. As described in the present application, at least on page 20, lines 14 to page 22, line 23, and with reference to Figs. 9A-9D, a suspended structure 218, upper structure 210, and lower structure 212 are formed in single crystal silicon layer 200, and in particular, in recessed regions 204 and 206. For instance, the present application at page 20, line 14 to page 21, line 23 states:

In FIG. 9A, upper recess 204 is etched in an single crystal silicon (SCS) middle wafer 200, and lower recess 206 is etched in the same SCS wafer 200. In a current embodiment, the upper and lower recesses 204 and 206 are circular. An upper structure 210 upstands within the upper recess 204. A lower structure 212 upstands within the lower recess 206.

In FIG. 9B, a deep reactive ion etch (DRIE) process is employed to produce a high aspect ratio channel 216 which results in a suspended structure 218 surrounded by such high aspect ratio channel 216. The suspended structure 218 is suspended from the lower upstanding structure 212 which is attached to the lower wafer 214. The lower upstanding structure, therefore, anchors a lower end of the suspended structure 218 to the lower wafer 214. The channel 216, for example, can be circular which results in the formation of a generally cylindrical suspended structure 218. It will be appreciated, however, that a circular channel is just one of many possible channel shapes as explained below. Next, an upper wafer 220 is bonded to the wafer 200 enclosing the suspended structure 218 between the upper and lower wafers 220 and 214. The upper upstanding structure 210 has been etched so that its upper or distal end is below the upper surface of the middle wafer 200. As a result, when the upper wafer 220 is bonded to the middle wafer 200, there is a gap between the upper upstanding structure 210 and the upper wafer 220. An upper or distal end of the suspended structure 218, is not unattached to the upper wafer 220 and is free to move about. The suspended structure 218 is disposed within a cavity defined by the etched recesses 204 and 206 and by the DRI etched channel 216. The lower upstanding structure 212 anchors the suspended structure 218 to the lower wafer 214 within the cavity. As illustrated in FIGS. 1, 3, 6, 12A-12B and 13, the lower upstanding structure 212 can be constructed to be a flexible member, such as a spring or a beam, for sensor or actuator applications. Also, the suspended structure 218 may be encapsulated in an environment, gaseous or near vacuum, in which the bonding of the upper wafer 220 may take place. (Emphasis added).

Accordingly, recesses 204 and 206 of Figs. 9A-9D include structure formed therein, e.g., upper structure 210, and lower structure 212.

Applicants therefore submit that claims 55-89 are clear and definite under 35 U.S.C §112, second paragraph, and Applicant's respectively request withdrawal of the rejection and allowance of all pending claims.

**CONCLUSION**

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket no.356952000304. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

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Respectfully submitted,

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